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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/079,027 | 02/19/2002 | Gennady Ruderman | V0077/7223 | 6406 |

7590 03/23/2004

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EXAMINER

PEAVEY, ENOCH E

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

3676

DATE MAILED: 03/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/079,027

Applicant(s)

RUDERMAN, GENNADY

Examiner

Enoch E Peavey

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

- I. Applicant's election with traverse of the claims of group I in Paper No. 6 is acknowledged. The traversal is on the ground(s) that search and examination of group II claims would not unduly burden the Examiner. This is not found persuasive because the claims of group II would require a search outside of Examiner's field of expertise.
- A. The requirement is still deemed proper and is therefore made FINAL.
- B. This application contains claim 35 drawn to an invention nonelected with traverse in Paper No. 6. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 102

- II. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- A. Claims 1-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Hubler, US No. 3,666,276. Hubler discloses a sealing device comprising a shaft seal (5a) having a sealing portion and a support portion (FIG. 2). The sealing portion is constructed and arranged to sealingly engage with a shaft and allow the shaft to be at least one of slidingly and rotationally moved relative to the sealing portion (FIG. 2).

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There is a seal mount (22) having a first end (12), a second end (13) and a flexible member (6a) between the first (12) and second ends (13) that enable movement of the first end relative to the second end in at least one degree of freedom (via flexible connecting bellows portion). The first end (12) is sealingly engageable to at least a portion of the support portion (3a) of the shaft seal (5a). The second end (13) is sealingly engageable to an engagement surface (2a) about a port into a process chamber (FIG. 2).

B. The flexible member defines a transition space in a first zone P1, which is in fluid communication with the *vacuum* process chamber (defined by the interior of 2a). The port comprises a central axis and the flexible member (6a) allows movement of the shaft (1a) seal in at least two degrees of freedom relative to the central axis of the port (FIG. 2). The port has a port size (13) substantially larger than the shaft size (outer diameter of 1a), which extends through the port (FIG. 2). The shaft may be angularly or laterally off set with respect to a central axis of the seal device (via its flexible bellows. The sealing portion of the shaft seal sealingly engages with a cylindrical-shaped portion of the shaft. The support portion of the shaft (1a) is substantially rigid and constructed of metal or PTFE (Col. 2, line 31). The flexible member may be rubber or an elastomer. The flexible member includes a plurality of undulations forming a bellows portion (FIG. 2). There is a first retaining ring constructed and arranged to sealingly engage a first end of the flexible member to the shaft. An o-ring is positioned between the first retaining ring and the shaft seal. There is a second retaining ring (13) constructed and arranged to sealingly engage a second end of the flexible member to an engagement

surface of the process chamber (interior of 2a). There is a second o-ring positioned between the second retaining ring (13) and the engagement surface (2a). The flexible member (6a) includes a flexible collar (portion connecting the bellows and 13). The device is fluidly connectable to a vacuum source (Col. 4, line 41).

Response to Arguments

III. Applicant's arguments filed 20 January 2004 have been fully considered but they are not persuasive. Applicant argues that Hublers device is insufficient for maintaining a vacuum seal for a process chamber. Examiner disagrees, this assertion is directly contradicted by Hubler, Col. 4, line 41, which specifically fluid tightness of the assembly can be determined by creating a vacuum in chamber P1.

IV. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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V. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Enoch E Peavey whose telephone number is 305 1977.

The examiner can normally be reached on Mon-Fri 8:00 am to 4:30 am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (703) 308- 3179. The fax phone numbers for the organization where this application or proceeding is assigned are 305 3597 for regular communications and 305 3597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 1113.

Enoch Peavey
Art Unit 3676
E. Peavey
March 19, 2004

Anthony Knight
Anthony Knight
Supervisory Patent Examiner
Group 3600